

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018190**Date Inspected:** 15-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG TRIAL ASSEMBLY YARD

DCP:

Segment # 11AE ~ 11BE

This Quality Assurance (QA) received ZPMC inspection notification sheet 00553 to perform final tension verification for Upper & Lower Chevron at Panel Point (PP) 95 and PP 100 for Segment 11AE ~ 11BE. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M22 x 70 DHGM220038 and final torque required was 480 N-m.

Bolt sizes used were M22 x 80 DHGM22091 and final torque required was 460 N-m.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Manual Torque wrench was been used with Sr. No. XO2-666.

Bay 16

This Quality Assurance (QA) received ZPMC inspection notification sheet 00552 to perform final tension verification for Service Platform. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were $\frac{3}{4}$ x 2" DHG60631 and final torque required was 346 N-m.

Manual Torque wrench was been used with Sr. No. XO2-666. See attached photo for further details.

WELDING:

Segment 11DE

This QA Inspector observed ZPMC qualified welding personnel identified as 067752 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA090-002; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-TC-U4b-FCM-1.

Segment 11DE~ 11EE

This QA Inspector observed ZPMC qualified welding personnel identified as 044515 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP708-001-021; located On Orthotropic Box Girder (OBG) Corner Assembly I-Rib to I-Rib CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-3213-U3b.

Segment 11DE

This QA Inspector observed ZPMC qualified welding personnel identified as 050289 perform Shielded Metal Arc Welding (SMAW), weld joint identified as EP174-001-006-; located On Orthotropic Box Girder (OBG) Corner Assembly I-Rib Hold Back Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2114-FCM-1

Segment 11CE ~ 11DE

This QA Inspector observed ZPMC qualified welding personnel identified as 050289 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA087-006; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-TC-U4b-FCM-1.

HEAT STRAIGHTENING:

This QA Inspector observed the following work in progress:

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) member identified as Segment 11EE Panel Point 107 Longitudinal Diaphragm. Distortion appeared to be caused by Welding. ZPMC Quality Control (QC) inspector identified as Mr. Wang Li Yang was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report HSR1 (B) 9840. See attached photo for further details.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.



Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune,Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
